

University of Bahrain/ College of IT/Department of Computer Science
ITCS 315 Midterm Exam
First Semester 2011-2012
21st November 2012
11:00am-12:00pm

ID#:

DRAGON

Section:

Question	Marks		Note
One	10	10	
Two	10	5.5	
Three	11	7	
Four	9	6	Q.5 5 4
Total	40	33.5	40

Question One (10 Marks)

A- Define the following terms? (4 marks)

1- WIMP Windows, icons, menus, pointers

Windows can be scrolled and moved, icons represent tools, menus contains options, pointers used to navigate on the screen.

2- WYSIWYG what you see is what you get, if you want to print a paper the printer print exactly the same paper.

B- Give two new designs of mouse? (4 marks)

1- toe mouse

2- air mouse

C- What is the meaning of surface computing? (2 marks)

it is the use of fingers on a touch sensitive device like a surface, the screen of the device response to the movement of the fingers.

Question Two (10 marks)

A- What are the HCI goals? Explain briefly. (4 marks)

3 - develop and improve the following

2

- safety: protect the user from dangerous conditions and undesirable situations.
- utility: provide the user with the right kind of functionality.
- usability: ease of learning and ease of use.
- effectiveness: concerns the users ability to accomplish their desired goals.
- efficiency: how quickly can users achieve their goals.
- appeal: how well the users like the system.

B- Draw a sketch (or write the processes) of Human-centered design model? (4 marks)

- data analyze

3.5

- user and task analyze.

- requirements specification.

- Design

- prototyping

- evaluating

Question Three (11 marks)

A- List the non-functional requirements? Explain one with an example? (5 marks)

- data requirement ✓
- environment requirement ✓
- user requirement ✓
- usability requirement ✓

* data requirement: the system must have all the data needed to do tasks.

example: system in a coffee shop must have all the prices of the food.

B- What are the stakeholders for the courses registration system at your University? List three (3 marks)

- students whom will register ✓
- system designers ✓
- registration dean ✓

~~C- what are the types of memory model? Explain briefly. (3 marks)~~

Question Four (9 Marks)

A- What are the common data gathering techniques? Which one is preferred to gather qualitative as well as quantitative data? (6 marks)

- Questionnaires ✓
- Interviews ✓
- group interview. ✓
- direct or indirect observations ✓
- studying documentation. ✓
- analyze similar products. ✓

6

* Questionnaires is preferred to gather qualitative as well as quantitative data. ✓

~~B- What are the three factors that Color appearance strongly affects by at least one of them? (3 marks)~~

Question Five (6 Marks)

There are many principles to support usability. List four and explain briefly one of them (6 marks)

1- flexibility ✓

2- control ✓

3- predictability ✓

4- simplicity ✓ If the system is simple, then it will be easy to learn and use.

11/15